

# VINEYARD APPARATUS, SYSTEM, AND METHOD FOR VINEYARD MECHANIZATION

## ABSTRACT OF THE DISCLOSURE

For more than thirty-two years, extensive research studies involving various concepts of total vineyard mechanization have been carried out at the Arkansas Agricultural Experiment Station under the direction of Justin R. Morris (22). Tommy Oldridge was one of the first growers in the region to commercially test, implement and improve upon the findings of these research studies. These studies at the University of Arkansas have involved the evaluation of trellising and training systems suitable for total vineyard mechanization, mechanical shoot positioning, mechanical pruning, mechanical thinning, mechanical harvesting, and the post-harvest handling and utilization of mechanically harvested grapes (2, 22, 23, 24, 25, 26, 27, 35). The success of this approach to vineyard mechanization has been the fact that it has concentrated on minimizing or eliminating all limiting factors impacting the system while maintaining, or in some cases improving, fruit quality. Also, the researchers have constantly developed, modified and evaluated new equipment for the mechanization of each viticultural operation requiring hand labor. A major effort has been placed on accomplishing these objectives without any loss in fruit quality.